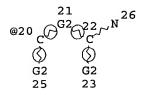
=> d que 112 STR L3 Cb @19 Ak @14 0~^ Ak Ak√X @17 18 @15 16 G1 11 G1 12



VAR G1=H/X/14/15/17/CN/NO2/19/CHO/20

VAR G2=C/O/S/N

NODE ATTRIBUTES:

ΑT 26 NSPEC IS RC CONNECT IS E2 7 RC AT CONNECT IS E1 RC AT 14 CONNECT IS E1 RC AT 18 CONNECT IS E1 RC AT 19 DEFAULT MLEVEL IS ATOM. IS SAT AT 19 GGCAT DEFAULT ECLEVEL IS LIMITED

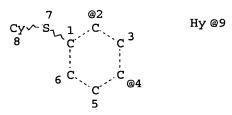
GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 25

STEREO ATTRIBUTES: NONE

1356440 SEA FILE=REGISTRY ABB=ON PLU=ON C6/ES AND NC5/ES L5 6794 SEA FILE=REGISTRY SUB=L5 SSS FUL L3 L7

Г8



VPA 9-2/4 U NODE ATTRIBUTES: CONNECT IS E2 RC AT DEFAULT MLEVEL IS ATOM GGCAT IS UNS AT 9 DEFAULT ECLEVEL IS LIMITED ECOUNT IS E5 C E1 N AT 9

GRAPH ATTRIBUTES:

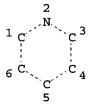
RSPEC 6

NUMBER OF NODES IS

STEREO ATTRIBUTES: NONE

L9 265 SEA FILE=REGISTRY SUB=L7 SSS FUL L8

L10 STR



NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RSPEC 1

NUMBER OF NODES IS

STEREO ATTRIBUTES: NONE

L11 133 SEA FILE=REGISTRY SUB=L9 SSS FUL L10 19 SEA FILE=HCAPLUS ABB=ON PLU=ON L11 L12

=> d 112 ibib abs hitstr 1-19

L12 ANSWER 1 OF 19 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2005:72766 HCAPLUS

DOCUMENT NUMBER: 142:176543

TITLE: Preparation of arylalkyne derivatives having EDG

receptor antagonist effect

INVENTOR (S): Sato, Susumu; Nakamura, Takeshi; Nara, Futoshi;

Komesu, Kiyoaki

PATENT ASSIGNEE(S):

Sankyo Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 181 pp. SOURCE:

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2005022986	A2	20050127	JP 2003-187530	20030630
PRIORITY APPLN. INFO.:			JP 2003-187530	20030630
GT				

$$\begin{array}{c|c}
A & C & R^1 \\
Q & X & \\
Q & X & \\
Z & & R^3
\end{array}$$

Ι

AB The title compds. (I), or salts or esters thereof [R1 = (un)substituted C1-17 alkyl optionally containing 1 or ≥2 of a double or triple bond, (un) substituted benzene ring, O, S, SO, SO2, and (un) substituted NH; R2 represents 1-3 substituents selected from H, HO, CO2H, NO2, halo, alkoxy, alkenyloxy, alkynyloxy, aralkyloxy, NH2, alkylamino, alkanoylamino, alkylthio, and (un) substituted C1-6 alkyl; R3 represents 1-3 substituents selected from H, HO, aralkyloxy, alkylamino, alkanoylamino, alkylthio, CO2H, NO2, halo, and (un) substituted C1-10 alkyl; X = alkylamino, HO, NH2, (un) substituted C1-6 alkoxy; Y = CO2H, SO3H, P(O) (OH) 2; Z = O, S, (un) substituted NH, CO, SO, SO2, (un) substituted CH2; ring A = (un) substituted 4- to 7-membered ring containing -Q:C- as a partial structure and optionally containing 1 or \geq 2 of CH:CH, N, O, (un) substituted NH, S, and CO; Q = C, N] are prepared These compds. are endothelial differentiation gene 1 (EDG-1) receptor antagonists and effective in preventing and/or treating inflammations, diseases associated with abnormal angiogenesis, cerebral vascular spasm, brain ischemia, cancer-related diseases, cerebral infarction, myocardial infarction, nephritis, pneumonia, immune diseases, Crohn's disease, colitis, or chronic diarrhea. Thus, Suzuki coupling of Me 5-bromo-2-[(4-butoxyphenyl)thio]benzoate with 2-formylphenylboronic acid in the presence of tetrakis(triphenylphosphine)palladium in a mixture of 4.6 M aqueous K2CO3

in 1,2-dimethoxyethane at 60° for 5 h to give 99% Me
4-[(4-butoxyphenyl)thio]-2'-formyl-1,1'-biphenyl-3-carboxylate (II).
2-[[7-(2-Propynyloxy)heptyl]oxy]tetrahydro-2H-pyran was treated with 1.6 M
BuLi/hexane in THF at -78°, stirred for 10 min, treated dropwise
with a solution of II in THF, and stirred for 1 h to give 78% Me
4-[(4-butoxyphenyl)thio]-2'-[1-hydroxy-4-[[7-[(tetrahydro-2H-pyran-2yl)oxy]heptyl]oxy]-2-butynyl]-1,1'-biphenyl-3-carboxylate which was
stirred in the presence of pyridinium p-toluenesulfonate in ethanol at
60° for 1 h to give 82% Me 4-[(4-butoxyphenyl)thio]-2'-[1-hydroxy-4[(7-hydroxyheptyl)oxy]-2-butynyl]-1,1'-biphenyl-3-carboxylate (III). III
was heated with NaOH in aqueous dioxane at 90° for 8 h to give 76%
sodium 4-[(4-butoxyphenyl)thio]-2'-[1-hydroxy-4-[(7-hydroxyheptyl)oxy]-2butynyl]-1,1'-biphenyl-3-carboxylate (IV). IV inhibited the
sphingosine-1-phosphate-stimulated production of cAMP in CHO cells expressing
Edg-1 with IC50 of 0.020 µM.

IT 832725-53-8P 832725-54-9P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of alkyne derivs. as EDG-1 receptor antagonists)

RN 832725-53-8 HCAPLUS

CN Benzenesulfonic acid, 2-[(4-butoxyphenyl)thio]-5-[3-(1-hydroxy-2-tridecynyl)-2-pyridinyl]-, monosodium salt (9CI) (CA INDEX NAME)

OH
$$CH-C \equiv C-(CH_2)_9-Me$$

$$N$$

$$N = BuO$$

Na

RN 832725-54-9 HCAPLUS

CN Benzenesulfonic acid, 2-[(4-butoxyphenyl)thio]-5-[3-(1,12-dihydroxy-2-tridecynyl)-2-pyridinyl]-, monosodium salt (9CI) (CA INDEX NAME)

OH OH CH-C=C-(CH₂)₈-CH-Me

$$^{\circ}$$
 $^{\circ}$
 $^{\circ}$

Na

IT 832726-79-1P 832726-80-4P 832726-81-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of alkyne derivs. as EDG-1 receptor antagonists)

RN 832726-79-1 HCAPLUS

CN Benzenesulfonic acid, 2-[(4-butoxyphenyl)thio]-5-[3-(1-hydroxy-2-tridecynyl)-2-pyridinyl]-, phenyl ester (9CI) (CA INDEX NAME)

RN 832726-80-4 HCAPLUS

CN Benzenesulfonic acid, 2-[(4-butoxyphenyl)thio]-5-[3-[12-[[(1,1-dimethylethyl)dimethylsilyl]oxy]-1-hydroxy-2-tridecynyl]-2-pyridinyl]-, phenyl ester (9CI) (CA INDEX NAME)

RN 832726-81-5 HCAPLUS

CN Benzenesulfonic acid, 2-[(4-butoxyphenyl)thio]-5-[3-(1,12-dihydroxy-2-tridecynyl)-2-pyridinyl]-, phenyl ester (9CI) (CA INDEX NAME)

L12 ANSWER 2 OF 19 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2004:1068277 HCAPLUS

DOCUMENT NUMBER:

142:155913

TITLE:

Amino-substituted heterocycles as isosteres of

trans-cinnamides: design and synthesis of heterocyclic biaryl sulfides as potent antagonists of LFA-1/ICAM-1

binding

AUTHOR(S):

Wang, Gary T.; Wang, Sheldon; Gentles, Robert; Sowin,

Thomas; Leitza, Sandra; Reilly, Edward B.; von

Geldern, Thomas W.

CORPORATE SOURCE: Global Pharmaceutical Research & Development, Abbott

Laboratories, Abbott Park, IL, 60064, USA

SOURCE: Bioorganic & Medicinal Chemistry Letters (2005),

15(1), 195-201

CODEN: BMCLE8; ISSN: 0960-894X

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 142:155913

GI

2-Amino-4-Ph pyridine and to a lesser extent, 4-amino-6-Ph pyrimidine were established as isosteres of trans-cinnamide moiety. Applying this isosterism to previously reported p-arylthio cinnamides resulted in the identification of 4-amino-6-(p-arylthio)phenylpyrimidines and 2-amino-4-(p-arylthio)phenylpyridines I (X = N, CH, R1 = 2-Me2CH; X = CH, R1 = 2-Me0, 3,4-OCH2CH2O; R2R3N = pyrrolidinyl, 4-hydroxypiperidinyl, 4-formyl-1-piperazinyl, etc.) as potent antagonists of LFA-1/ICAM-1 binding.

Ι

ΤТ 388117-88-2P 388117-90-6P 388117-91-7P 388117-93-9P 388117-94-0P 388117-96-2P 388117-97-3P 388117-98-4P 388117-99-5P 388118-00-1P 388118-02-3P 388118-06-7P 388118-07-8P 388118-08-9P 388118-09-0P 388118-11-4P 388118-12-5P 388118-14-7P 388118-15-8P 388118-16-9P 388118-17-0P 388118-18-1P 388118-20-5P 388118-22-7P 388118-24-9P 415718-12-6P 831189-91-4P 831189-92-5P 831189-93-6P 831189-94-7P 831189-95-8P 831189-96-9P 831189-97-0P 831189-98-1P 831189-99-2P 831190-00-2P 831190-01-3P 831190-02-4P 831190-04-6P 831190-07-9P 831190-09-1P 831190-10-4P 831190-11-5P 831190-12-6P 831190-13-7P 831190-14-8P 831190-15-9P 831190-16-0P 831190-17-1P 831190-18-2P 831190-19-3P 831190-20-6P 831190-21-7P 831190-22-8P 831190-23-9P 831190-24-0P 831190-25-1P 831190-26-2P 831190-27-3P 831190-28-4P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation of amino-substituted arylthiophenyl oxazoles, thiazoles, pyridines and pyrimidines as isosteres of trans-cinnamides and potent antagonists of LFA-1/ICAM-1 binding)

RN 388117-88-2 HCAPLUS

CN 3-Pyrrolidinol, 1-[4-[4-[[2-(1-methylethyl)phenyl]thio]-3-

(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 388117-90-6 HCAPLUS

CN 4-Piperidinol, 1-[4-[4-[(2-(1-methylethyl)phenyl]thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 388117-91-7 HCAPLUS

CN 1-Piperazinecarboxaldehyde, 4-[4-[4-[[2-(1-methylethyl)phenyl]thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 388117-93-9 HCAPLUS

CN 4-Piperidinemethanol, 1-[4-[4-[[2-(1-methylethyl)phenyl]thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 388117-94-0 HCAPLUS

CN Acetamide, N-[(3R)-1-[4-[4-[2-(1-methylethyl)phenyl]thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]-3-pyrrolidinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 388117-96-2 HCAPLUS

CN Piperazine, 1-acetyl-4-[4-[4-[2-(1-methylethyl)phenyl]thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 388117-97-3 HCAPLUS

CN 4-Piperidinecarboxamide, 1-[4-[4-[[2-(1-methylethyl)phenyl]thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 388117-98-4 HCAPLUS

CN 4-Piperidinecarboxylic acid, 1-[4-[4-[[2-(1-methylethyl)phenyl]thio]-3-

(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 388117-99-5 HCAPLUS

CN 3-Piperidinecarboxylic acid, 1-[4-[4-[[2-(1-methylethyl)phenyl]thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 388118-00-1 HCAPLUS

CN 4-Piperidineethanol, 1-[4-[4-[[2-(1-methylethyl)phenyl]thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 388118-02-3 HCAPLUS

CN L-Proline, 4-hydroxy-1-[4-[4-[(2-(1-methylethyl)phenyl]thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]-, (4R)- (9CI) (CA INDEX NAME)

RN 388118-06-7 HCAPLUS
CN 3-Pyrrolidinol, 1-[4-[4-[(2-methoxyphenyl)thio]-3-(trifluoromethyl)phenyl]2-pyridinyl]-, (3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 388118-07-8 HCAPLUS
CN 2-Pyrrolidinemethanol, 1-[4-[4-[(2-methoxyphenyl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]-, (2R)- (9CI) (CA INDEX NAME)

RN 388118-08-9 HCAPLUS

CN 4-Piperidinol, 1-[4-[4-[(2-methoxyphenyl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 388118-09-0 HCAPLUS

CN 1-Piperazinecarboxaldehyde, 4-[4-[4-[(2-methoxyphenyl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 388118-11-4 HCAPLUS

CN 4-Piperidinemethanol, 1-[4-[4-[(2-methoxyphenyl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 388118-12-5 HCAPLUS

Absolute stereochemistry.

RN 388118-14-7 HCAPLUS

CN Piperazine, 1-acetyl-4-[4-[4-[(2-methoxyphenyl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 388118-15-8 HCAPLUS

CN 4-Piperidinecarboxamide, 1-[4-[4-[(2-methoxyphenyl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

$$F_3C$$
 N
 N
 $C-NH_2$
OMe

RN 388118-16-9 HCAPLUS

CN 4-Piperidinecarboxylic acid, 1-[4-[4-[(2-methoxyphenyl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 388118-17-0 HCAPLUS

CN 3-Piperidinecarboxylic acid, 1-[4-[4-[(2-methoxyphenyl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 388118-18-1 HCAPLUS

CN 4-Piperidineethanol, 1-[4-[4-[(2-methoxyphenyl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 388118-20-5 HCAPLUS

CN L-Proline, 4-hydroxy-1-[4-[4-[(2-methoxyphenyl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]-, (4R)- (9CI) (CA INDEX NAME)

RN 388118-22-7 HCAPLUS

CN 1H-1,4-Diazepine, 1-acetylhexahydro-4-[4-[4-[(2-methoxyphenyl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 388118-24-9 HCAPLUS

CN Piperazine, 1-[4-[4-[(2-methoxyphenyl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]-4-propyl- (9CI) (CA INDEX NAME)

RN 415718-12-6 HCAPLUS

CN Piperazine, 1-ethyl-4-[4-[4-[2-(1-methylethyl)phenyl]thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 831189-91-4 HCAPLUS

CN Pyridine, 4-[4-[[2-(1-methylethyl)phenyl]thio]-3-(trifluoromethyl)phenyl]-2-(1-pyrrolidinyl)- (9CI) (CA INDEX NAME)

RN 831189-92-5 HCAPLUS

CN Pyridine, 4-[4-[[2-(1-methylethyl)phenyl]thio]-3-(trifluoromethyl)phenyl]-2-(1-piperidinyl)- (9CI) (CA INDEX NAME)

RN 831189-93-6 HCAPLUS

CN 1H-Azepine, hexahydro-1-[4-[4-[[2-(1-methylethyl)phenyl]thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 831189-94-7 HCAPLUS

CN Pyridine, 4-[4-[[2-(1-methylethyl)phenyl]thio]-3-(trifluoromethyl)phenyl]-2-(4-methyl-1-piperidinyl)- (9CI) (CA INDEX NAME)

RN 831189-95-8 HCAPLUS

CN Pyridine, 4-[4-[[2-(1-methylethyl)phenyl]thio]-3-(trifluoromethyl)phenyl]-2-(4-propyl-1-piperidinyl)- (9CI) (CA INDEX NAME)

RN 831189-96-9 HCAPLUS

CN Pyridine, 2-(3,3-dimethyl-1-piperidinyl)-4-[4-[[2-(1-methylethyl)phenyl]thio]-3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 831189-97-0 HCAPLUS

CN 3-Piperidinecarboxylic acid, 4-hydroxy-1-[4-[4-[2-(1-methylethyl)phenyl]thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]-, (3R,4R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 831189-98-1 HCAPLUS

CN Pyridine, 4-[4-[(2-(1-methylethyl)phenyl]thio]-3-(trifluoromethyl)phenyl]-2-[4-(1H-tetrazol-5-yl)-1-piperidinyl]- (9CI) (CA INDEX NAME)

RN 831189-99-2 HCAPLUS

CN Piperazine, 1-methyl-4-[4-[4-[[2-(1-methylethyl)phenyl]thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 831190-00-2 HCAPLUS

CN Piperazine, 1-cyclohexyl-4-[4-[4-[(2-(1-methylethyl)phenyl]thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 831190-01-3 HCAPLUS

CN Piperazine, 1-(2,5-dimethylphenyl)-4-[4-[4-[(2-(1-methylethyl)phenyl]thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 831190-02-4 HCAPLUS

CN Piperazine, 1-[4-[4-[[2-(1-methylethyl)phenyl]thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]-4-(2-pyridinyl)- (9CI) (CA INDEX NAME)

RN 831190-04-6 HCAPLUS Pyrazine, [4-[4-[4-[[2-(1-methylethyl)phenyl]thio]-3-CN (trifluoromethyl)phenyl]-2-pyridinyl]-1-piperazinyl]- (9CI) (CA INDEX

831190-07-9 HCAPLUS RN2-Pyrrolidinemethanol, 1-[4-[4-[(2-(1-methylethyl)phenyl]thio]-3-CN

(trifluoromethyl)phenyl]-2-pyridinyl]-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

831190-09-1 HCAPLUS RN

L-Proline, 1-[4-[4-[[2-(1-methylethyl)phenyl]thio]-3-CN

(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 831190-10-4 HCAPLUS

CN Acetamide, N-methyl-N-[(3R)-1-[4-[4-[[2-(1-methylethyl)phenyl]thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]-3-pyrrolidinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 831190-11-5 HCAPLUS

CN 3-Pyrrolidinol, 1-[4-[4-(1,3-benzodioxol-5-ylthio)-3-(trifluoromethyl)phenyl]-2-pyridinyl]-, (3R)- (9CI) (CA INDEX NAME)

RN 831190-12-6 HCAPLUS
CN 2-Pyrrolidinemethanol, 1-[4-[4-(1,3-benzodioxol-5-ylthio)-3-(trifluoromethyl)phenyl]-2-pyridinyl]-, (2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 831190-13-7 HCAPLUS
CN L-Proline, 1-[4-[4-[(2-methoxyphenyl)thio]-3-(trifluoromethyl)phenyl]-2pyridinyl]- (9CI) (CA INDEX NAME)

RN 831190-14-8 HCAPLUS

CN L-Proline, 1-[4-[4-(1,3-benzodioxol-5-ylthio)-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 831190-15-9 HCAPLUS

CN Acetamide, N-[(3R)-1-[4-[4-(1,3-benzodioxol-5-ylthio)-3-(trifluoromethyl)phenyl]-2-pyridinyl]-3-pyrrolidinyl]- (9CI) (CA INDEX NAME)

RN 831190-16-0 HCAPLUS
CN L-Proline, 1-[4-[4-(1,3-benzodioxol-5-ylthio)-3-(trifluoromethyl)phenyl]-2-pyridinyl]-4-hydroxy-, (4R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 831190-17-1 HCAPLUS
CN Acetamide, N-[(3R)-1-[4-[4-[(2-methoxyphenyl)thio]-3(trifluoromethyl)phenyl]-2-pyridinyl]-3-pyrrolidinyl]-N-methyl- (9CI) (CA
INDEX NAME)

RN 831190-18-2 HCAPLUS

CN Acetamide, N-[(3R)-1-[4-[4-(1,3-benzodioxol-5-ylthio)-3(trifluoromethyl)phenyl]-2-pyridinyl]-3-pyrrolidinyl]-N-methyl- (9CI) (CA
INDEX NAME)

Absolute stereochemistry.

RN 831190-19-3 HCAPLUS
CN 4-Piperidinol, 1-[4-[4-(1,3-benzodioxol-5-ylthio)-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 831190-20-6 HCAPLUS

CN 4-Piperidinemethanol, 1-[4-[4-(1,3-benzodioxol-5-ylthio)-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 831190-21-7 HCAPLUS

CN 4-Piperidineethanol, 1-[4-[4-(1,3-benzodioxol-5-ylthio)-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 831190-22-8 HCAPLUS

CN 4-Piperidinecarboxamide, 1-[4-[4-(1,3-benzodioxol-5-ylthio)-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 831190-23-9 HCAPLUS

CN 4-Piperidinecarboxylic acid, 1-[4-[4-(1,3-benzodioxol-5-ylthio)-3-

(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 831190-24-0 HCAPLUS

CN 3-Piperidinecarboxylic acid, 1-[4-[4-(1,3-benzodioxol-5-ylthio)-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 831190-25-1 HCAPLUS

CN Piperazine, 1-[4-[4-(1,3-benzodioxol-5-ylthio)-3-(trifluoromethyl)phenyl]-2-pyridinyl]-4-propyl- (9CI) (CA INDEX NAME)

n-Pr

RN 831190-26-2 HCAPLUS

CN 1-Piperazinecarboxaldehyde, 4-[4-[4-(1,3-benzodioxol-5-ylthio)-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 831190-27-3 HCAPLUS

CN Piperazine, 1-acetyl-4-[4-[4-(1,3-benzodioxol-5-ylthio)-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 831190-28-4 HCAPLUS

CN 1H-1,4-Diazepine, 1-acetyl-4-[4-[4-[4-(1,3-benzodioxol-5-ylthio)-3-(trifluoromethyl)phenyl]-2-pyridinyl]hexahydro- (9CI) (CA INDEX NAME)

IT 388118-61-4P 388118-62-5P 388118-65-8P 388118-66-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of amino-substituted arylthiophenyl oxazoles, thiazoles, pyridines and pyrimidines as isosteres of trans-cinnamides and potent antagonists of LFA-1/ICAM-1 binding)

RN 388118-61-4 HCAPLUS

CN Pyridine, 4-[4-[[2-(1-methylethyl)phenyl]thio]-3-(trifluoromethyl)phenyl]-, 1-oxide (9CI) (CA INDEX NAME)

RN 388118-62-5 HCAPLUS

CN Pyridine, 2-chloro-4-[4-[[2-(1-methylethyl)phenyl]thio]-3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 388118-65-8 HCAPLUS

CN Pyridine, 4-[4-[(2-methoxyphenyl)thio]-3-(trifluoromethyl)phenyl]-,

1-oxide (9CI) (CA INDEX NAME)

RN 388118-66-9 HCAPLUS

REFERENCE COUNT:

THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 3 OF 19 HCAPLUS COPYRIGHT 2005 ACS on STN

8

ACCESSION NUMBER:

2004:1019618 HCAPLUS

DOCUMENT NUMBER:

142:69141

TITLE:

Methods of identifying non-specific inhibitors of

biomolecules

INVENTOR(S):

Shoichet, Brian K.; McGovern, Susan L.

PATENT ASSIGNEE(S):

USA

SOURCE:

U.S. Pat. Appl. Publ., 16 pp.

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004234942	A1	20041125	US 2002-171814	20020614
PRIORITY APPLN. INFO.:			US 2001-298527P P	20010615

AB The invention provides methods of identifying compds. that non-specifically inhibit biol. reactions. The invention further includes kits that facilitate this identification. In addition, compilations of compds. for use in high throughput drug screening that have been evaluated by the disclosed methodol. are also part of the d invention. The invention provides methods for identifying a false pos. in a screening assay by measuring the activity of at least one biol. activity in the presence and absence of a small mol. compound capable of inhibiting aggregate formation, e.g., digitonin.

IT 813420-78-9

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)

(methods of identifying non-specific inhibitors of biomols.)

RN 813420-78-9 HCAPLUS

CN 4-Pyridinecarboxylic acid, 2-(4-chlorophenyl)-6-[4-[(4chlorophenyl)thio]phenyl]- (9CI) (CA INDEX NAME)

L12 ANSWER 4 OF 19 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:121178 HCAPLUS

DOCUMENT NUMBER: 140:299089

TITLE: Structure of an Allosteric Inhibitor of LFA-1 Bound to

the I-Domain Studied by Crystallography, NMR, and

Calorimetry

AUTHOR(S): Crump, Matthew P.; Ceska, Thomas A.; Spyracopoulos,

Leo; Henry, Alistair; Archibald, Sarah C.; Alexander,

Rikki; Taylor, Richard J.; Findlow, Stuart C.;

O'Connell, James; Robinson, Martyn K.; Shock, Anthony

CORPORATE SOURCE: School of Biological Sciences, University of

Southampton, Southampton, SO16 7PX, UK

SOURCE: Biochemistry (2004), 43(9), 2394-2404

CODEN: BICHAW; ISSN: 0006-2960

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

AB LFA-1 (lymphocyte function-associated antigen-1) plays a role in intercellular adhesion and lymphocyte trafficking and activation and is an attractive anti-inflammatory drug target. The α-subunit of LFA-1, in common with several other integrins, has an N-terminally inserted domain (I-domain) of .apprx.200 amino acids that plays a central role in regulating ligand binding to LFA-1. An addnl. region, termed the I-domain allosteric site (IDAS), has been identified exclusively within the LFA-1 I-domain and shown to regulate the function of this protein. The IDAS is occupied by small mol. LFA-1 inhibitors when cocrystd. or analyzed by 15N-1H HSQC (heteronuclear single-quantum coherence) NMR titration expts. W report here a novel arylthio inhibitor that binds the I-domain with a Kd of 18.3 nM as determined by isothermal titration calorimetry (ITC). This

value is

in close agreement with the IC50 (10.9 nM) derived from a biochem. competition assay (DELFIA) that measures the level of inhibition of binding of whole LFA-1 to its ligand, ICAM-1. Having established the strong affinity of the arylthio inhibitor for the isolated I-domain, we have used a range of techniques to further characterize the binding, including ITC, NMR, and X-ray crystallog. We have first developed an effective ITC binding assay for use with low-solubility inhibitors that avoids the need for ELISA-based assays. In addition, we utilized a fast NMR-based assay for the generation of I-domain-inhibitor models. This is based around the collection of HCCH-TOCSY spectra of LFA-1 in the bound form and the identification of a subset of side chain Me groups that give chemical

shift changes upon binding of LFA-1 inhibitors. This subset was used in two-dimensional 13C-15N and 15N-filtered and -edited two-dimensional NMR expts. to identify a minimal set of intraligand and ligand-protein NOEs, resp. (nuclear Overhauser enhancements). Models from the NMR data were assessed by comparison to an X-ray crystallog. structure of the complex, confirming that the method correctly predicted the essential features of the bound ligand.

IT 677009-29-9D, complexes with LFA-1 677009-30-2D,

complexes with LFA-1

RL: PRP (Properties)

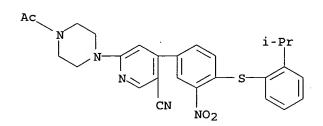
(crystallog., NMR, and calorimetry address interaction of allosteric inhibitors with I-domain of human LFA-1)

RN 677009-29-9 HCAPLUS

CN Piperazine, 1-acetyl-4-[4-[4-[(2-ethoxyphenyl)thio]-3-nitrophenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 677009-30-2 HCAPLUS

CN Piperazine, 1-acetyl-4-[5-cyano-4-[4-[[2-(1-methylethyl)phenyl]thio]-3-nitrophenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)



own work

REFERENCE COUNT:

THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 5 OF 19 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2002:717059 HCAPLUS

DOCUMENT NUMBER:

137:247710

TITLE:

Preparation of aryl phenylheterocyclyl sulfides as

cell adhesion-inhibiting anti-inflammatory and

immune-suppressive agents

INVENTOR(S):
PATENT ASSIGNEE(S):

Wang, Gary T.; Wang, Sheldon; Gentles, Robert

Icos Corp., USA

SOURCE:

U.S. Pat. Appl. Publ., 44 pp.

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002132807	A1	20020919	US 2001-888840	20010625
US 6787542	B2	20040907		
US 2005014746	A1	20050120	US 2004-773332	20040209
PRIORITY APPLN. INFO.:			US 2000-214983P P	20000629
			US 2001-888840 A3	20010625
OTHER SOURCE(S):	MARPAT	137:247710		

AB The title compds. [I; R1-R5 = H, halo, alkyl, etc. (with proviso that at least one of R1 or R3 = (un)substituted pyridyl, pyrimidyl, oxazolyl, etc.); A = (un)substituted aryl, heterocyclyl] were prepared for treating inflammatory and immune diseases, such as arthritis, asthma, reperfusion injury, inflammatory bowel disease etc. The products I had IC50 <20 μM for inhibition of ICAM-1 binding to LFA-1. 2-Me2CHC6H4SH was etherified with 4,3-F(F3C)C6H3COMe, followed by bromination, and reaction with 1-carbamoylpiperidine to give the sulfide II.

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IT
    388117-88-2P 388117-89-3P 388117-90-6P
    388117-91-7P 388117-92-8P 388117-93-9P
    388117-94-0P 388117-95-1P 388117-96-2P
    388117-97-3P 388117-98-4P 388117-99-5P
    388118-00-1P 388118-01-2P 388118-02-3P
    388118-03-4P 388118-04-5P 388118-05-6P
    388118-06-7P 388118-07-8P 388118-08-9P
    388118-09-0P 388118-10-3P 388118-11-4P
    388118-12-5P 388118-13-6P 388118-14-7P
    388118-15-8P 388118-16-9P 388118-17-0P
    388118-18-1P 388118-19-2P 388118-20-5P
    388118-21-6P 388118-22-7P 388118-23-8P
    388118-24-9P 388118-25-0P 388118-26-1P
    388118-27-2P 388118-28-3P 388118-29-4P
    388118-30-7P 388118-31-8P 388118-32-9P
    388118-33-0P 388118-34-1P 388118-35-2P
    388118-36-3P 388118-37-4P 388118-38-5P
    388118-39-6P 388118-40-9P 388118-41-0P
    388118-42-1P 388118-43-2P 388118-44-3P
    388118-45-4P 388118-46-5P
```

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of aryl phenylheterocyclyl sulfides as cell adhesion-inhibiting antiinflammatory and immunosuppressive agents)

RN 388117-88-2 HCAPLUS

CN

3-Pyrrolidinol, 1-[4-[4-[[2-(1-methylethyl)phenyl]thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 388117-89-3 HCAPLUS

CN 2-Pyrrolidinemethanol, 1-[4-[4-[[2-(1-methylethyl)phenyl]thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]-, (2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 388117-90-6 HCAPLUS

CN 4-Piperidinol, 1-[4-[4-[[2-(1-methylethyl)phenyl]thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 388117-91-7 HCAPLUS

CN 1-Piperazinecarboxaldehyde, 4-[4-[4-[[2-(1-methylethyl)phenyl]thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 388117-92-8 HCAPLUS
CN D-Proline, 1-[4-[4-[[2-(1-methylethyl)phenyl]thio]-3(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 388117-93-9 HCAPLUS
CN 4-Piperidinemethanol, 1-[4-[4-[[2-(1-methylethyl)phenyl]thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN388117-95-1 HCAPLUS

Acetamide, N-[1-[4-[4-[[2-(1-methylethyl)phenyl]thio]-3-CN (trifluoromethyl)phenyl]-2-pyridinyl]-3-pyrrolidinyl]- (9CI) (CA INDEX NAME)

RN

388117-96-2 HCAPLUS Piperazine, 1-acetyl-4-[4-[4-[(2-(1-methylethyl)phenyl]thio]-3-CN(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 388117-97-3 HCAPLUS

4-Piperidinecarboxamide, 1-[4-[4-[[2-(1-methylethyl)phenyl]thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 388117-98-4 HCAPLUS

CN 4-Piperidinecarboxylic acid, 1-[4-[4-[[2-(1-methylethyl)phenyl]thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 388117-99-5 HCAPLUS

CN 3-Piperidinecarboxylic acid, 1-[4-[4-[[2-(1-methylethyl)phenyl]thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 388118-00-1 HCAPLUS

CN 4-Piperidineethanol, 1-[4-[4-[[2-(1-methylethyl)phenyl]thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 388118-01-2 HCAPLUS

CN D-Proline, 4-hydroxy-1-[4-[4-[[2-(1-methylethyl)phenyl]thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]-, (4R)- (9CI) (CA INDEX NAME) Absolute stereochemistry.

RN 388118-02-3 HCAPLUS

CN L-Proline, 4-hydroxy-1-[4-[4-[[2-(1-methylethyl)phenyl]thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]-, (4R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 388118-03-4 HCAPLUS

CN Acetamide, N-ethyl-N-[1-[4-[4-[[2-(1-methylethyl)phenyl]thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]-3-pyrrolidinyl]- (9CI) (CA INDEX NAME)

RN 388118-04-5 HCAPLUS

CN 3-Piperidinecarboxylic acid, 4-hydroxy-1-[4-[4-[[2-(1-methylethyl)phenyl]thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]-, (3R,4S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 388118-05-6 HCAPLUS

CN 1-Piperazinepropanamine, N,N-dimethyl-4-[4-[4-[2-(1-methylethyl)phenyl]thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 388118-06-7 HCAPLUS
CN 3-Pyrrolidinol, 1-[4-[4-[(2-methoxyphenyl)thio]-3-(trifluoromethyl)phenyl]2-pyridinyl]-, (3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Absolute stereochemistry.

RN 388118-08-9 HCAPLUS

CN 4-Piperidinol, 1-[4-[4-[(2-methoxyphenyl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 388118-09-0 HCAPLUS

CN 1-Piperazinecarboxaldehyde, 4-[4-[4-[(2-methoxyphenyl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 388118-10-3 HCAPLUS

CN D-Proline, 1-[4-[4-[(2-methoxyphenyl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 388118-11-4 HCAPLUS

CN 4-Piperidinemethanol, 1-[4-[4-[(2-methoxyphenyl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 388118-12-5 HCAPLUS

CN Acetamide, N-[(3R)-1-[4-[4-[(2-methoxyphenyl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]-3-pyrrolidinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 388118-13-6 HCAPLUS

CN Acetamide, N-[1-[4-[4-[(2-methoxyphenyl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]-3-pyrrolidinyl]- (9CI) (CA INDEX NAME)

RN 388118-14-7 HCAPLUS

CN Piperazine, 1-acetyl-4-[4-[4-[(2-methoxyphenyl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 388118-15-8 HCAPLUS

CN 4-Piperidinecarboxamide, 1-[4-[4-[(2-methoxyphenyl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 388118-16-9 HCAPLUS

CN 4-Piperidinecarboxylic acid, 1-[4-[4-[(2-methoxyphenyl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 388118-17-0 HCAPLUS

CN 3-Piperidinecarboxylic acid, 1-[4-[4-[(2-methoxyphenyl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 388118-18-1 HCAPLUS

CN 4-Piperidineethanol, 1-[4-[4-[(2-methoxyphenyl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 388118-19-2 HCAPLUS

CN D-Proline, 4-hydroxy-1-[4-[4-[(2-methoxyphenyl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]-, (4R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 388118-20-5 HCAPLUS

CN L-Proline, 4-hydroxy-1-[4-[4-[(2-methoxyphenyl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]-, (4R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 388118-21-6 HCAPLUS

CN Acetamide, N-[1-[4-[4-[(2-methoxyphenyl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]-3-pyrrolidinyl]-N-methyl- (9CI) (CA INDEX NAME)

RN 388118-22-7 HCAPLUS

CN 1H-1,4-Diazepine, 1-acetylhexahydro-4-[4-[4-[(2-methoxyphenyl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 388118-23-8 HCAPLUS

CN 1-Piperazinepropanamine, 4-[4-[4-[(2-methoxyphenyl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]-N,N-dimethyl- (9CI) (CA INDEX NAME)

RN 388118-24-9 HCAPLUS

CN Piperazine, 1-[4-[4-[(2-methoxyphenyl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]-4-propyl- (9CI) (CA INDEX NAME)

388118-25-0 HCAPLUS RN 3-Piperidinemethanol, 1-[4-[4-[(2-methoxyphenyl)thio]-3-CN(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

388118-26-1 HCAPLUS RN3-Pyrrolidinol, 1-[4-[4-[(2,3-dihydro-1,4-benzodioxin-6-yl)thio]-3-CN(trifluoromethyl)phenyl]-2-pyridinyl]-, (3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

388118-27-2 HCAPLUS RN CN

4-Piperidinol, 1-[4-[4-[(2,3-dihydro-1,4-benzodioxin-6-yl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 388118-28-3 HCAPLUS

CN 2-Pyrrolidinemethanol, 1-[4-[4-[(2,3-dihydro-1,4-benzodioxin-6-yl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]-, (2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 388118-29-4 HCAPLUS

CN D-Proline, 1-[4-[4-[(2,3-dihydro-1,4-benzodioxin-6-yl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 388118-30-7 HCAPLUS

CN 4-Piperidinemethanol, 1-[4-[4-[(2,3-dihydro-1,4-benzodioxin-6-yl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 388118-31-8 HCAPLUS

CN Acetamide, N-[(3R)-1-[4-[4-[(2,3-dihydro-1,4-benzodioxin-6-yl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]-3-pyrrolidinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 388118-32-9 HCAPLUS

CN Acetamide, N-[1-[4-[4-[(2,3-dihydro-1,4-benzodioxin-6-yl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]-3-pyrrolidinyl]- (9CI) (CA INDEX NAME)

RN 388118-33-0 HCAPLUS

CN Piperazine, 1-acetyl-4-[4-[4-[(2,3-dihydro-1,4-benzodioxin-6-yl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 388118-34-1 HCAPLUS

CN 4-Piperidinecarboxamide, 1-[4-[4-[(2,3-dihydro-1,4-benzodioxin-6-yl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ H_2N-C & & \\ & & \\ O & & \\ \end{array}$$

RN 388118-35-2 HCAPLUS

CN 4-Piperidinecarboxylic acid, 1-[4-[4-[(2,3-dihydro-1,4-benzodioxin-6-yl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 388118-36-3 HCAPLUS

CN 3-Piperidinecarboxylic acid, 1-[4-[4-[(2,3-dihydro-1,4-benzodioxin-6-yl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 388118-37-4 HCAPLUS

CN 4-Piperidineethanol, 1-[4-[4-[(2,3-dihydro-1,4-benzodioxin-6-yl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & \\ \text{HO-CH}_2-\text{CH}_2 & & & \\ \end{array}$$

RN 388118-38-5 HCAPLUS

CN D-Proline, 1-[4-[4-[(2,3-dihydro-1,4-benzodioxin-6-yl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]-4-hydroxy-, (4R)- (9CI) (CA INDEX NAME) Absolute stereochemistry.

RN 388118-39-6 HCAPLUS

CN L-Proline, 1-[4-[4-[(2,3-dihydro-1,4-benzodioxin-6-yl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]-4-hydroxy-, (4R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 388118-40-9 HCAPLUS

CN Acetamide, N-[1-[4-[4-[(2,3-dihydro-1,4-benzodioxin-6-yl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]-3-pyrrolidinyl]-N-methyl- (9CI) (CA INDEX NAME)

RN 388118-41-0 HCAPLUS

CN 1H-1,4-Diazepine, 1-acetyl-4-[4-[4-[(2,3-dihydro-1,4-benzodioxin-6-yl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]hexahydro- (9CI) (CA INDEX NAME)

RN 388118-42-1 HCAPLUS

CN 1-Piperazinepropanamine, 4-[4-[4-[(2,3-dihydro-1,4-benzodioxin-6-yl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]-N,N-dimethyl- (9CI) (CA INDEX NAME)

$$Me_2N-(CH_2)_3$$
 CF_3
 O
 O

RN 388118-43-2 HCAPLUS

CN Piperazine, 1-[4-[4-[(2,3-dihydro-1,4-benzodioxin-6-yl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]-4-propyl- (9CI) (CA INDEX NAME)

RN 388118-44-3 HCAPLUS

CN Piperazine, 1-[4-[4-[(2,3-dihydro-1,4-benzodioxin-6-yl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]-4-(2-propenyl)- (9CI) (CA INDEX NAME)

RN 388118-45-4 HCAPLUS

CN 1-Piperazineethanol, 4-[4-[4-[(2,3-dihydro-1,4-benzodioxin-6-yl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & \\ \text{HO-} & \text{CH}_2 - \text{CH}_2 \end{array}$$

RN 388118-46-5 HCAPLUS

CN 3-Piperidinemethanol, 1-[4-[4-[(2,3-dihydro-1,4-benzodioxin-6-yl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

IT 388118-61-4P 388118-62-5P 388118-65-8P

388118-66-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of aryl phenylheterocyclyl sulfides as cell adhesion-inhibiting antiinflammatory and immunosuppressive agents)

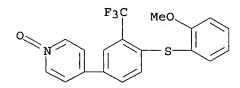
RN 388118-61-4 HCAPLUS

CN Pyridine, 4-[4-[[2-(1-methylethyl)phenyl]thio]-3-(trifluoromethyl)phenyl], 1-oxide (9CI) (CA INDEX NAME)

RN 388118-62-5 HCAPLUS

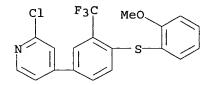
CN Pyridine, 2-chloro-4-[4-[[2-(1-methylethyl)phenyl]thio]-3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 388118-65-8 HCAPLUS



RN 388118-66-9 HCAPLUS

CN Pyridine, 2-chloro-4-[4-[(2-methoxyphenyl)thio]-3-(trifluoromethyl)phenyl](9CI) (CA INDEX NAME)



REFERENCE COUNT: 111 THERE ARE 111 CITED REFERENCES AVAILABLE FOR

THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L12 ANSWER 6 OF 19 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:293978 HCAPLUS

DOCUMENT NUMBER: 136:337341

TITLE: Materials and methods to modulate ligand

binding/enzymic activity of α/β proteins containing an allosteric regulatory site

INVENTOR(S): Stauton, Donald E. PATENT ASSIGNEE(S): Icos Corporation, USA

SOURCE: PCT Int. Appl., 163 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE			
WO 2002031511	A2	20020418	WO 2001-US32047	20011012			
WO 2002031511	A3	20030313					
W: AE, AG, AI	. AM. AT	. AU. AZ. B	BA. BB. BG. BR. BY. BZ.	CA. CH. CN.			

AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,

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GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
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             PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG,
             UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
    CA 2425581
                          AA
                                20020418
                                            CA 2001-2425581
                                                                    20011012
                                            AU 2002-13196
    AU 2002013196
                          A5
                                20020422
                                                                    20011012
                                            US 2001-976935
    US 2003088061
                                20030508
                          A1
                                                                    20011012
                                20030709
                                            EP 2001-981560
    EP 1325341
                          A2
                                                                    20011012
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
                                             JP 2002-534845
    JP 2004511496
                          T2
                                20040415
                                                                    20011012
                                            US 2000-239750P
PRIORITY APPLN. INFO.:
                                                                 Р
                                                                    20001012
                                            WO 2001-US32047
                                                                 W
                                                                    20011012
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Methods of modulating binding between an α/β protein and a binding partner are provided, along with methods of identifying modulators and their use. The methods comprise contacting the α/β protein with an allosteric effector mol. which binds to an allosteric site of the α/β protein and alters the conformation of the α/β protein such that the binding of the α/β protein to a binding partner is modulated. Thus, a primary screen for inhibitors of the classical pathway complement protein C2 and alternative pathway complement protein factor B involving modifications of standard hemolytic CH50 and AH50 assays in a microtiter plate format was carried out. Lead compds. identified in this screen were submitted to a second screening using purified complement proteins to determine which stage of complement activation the compds. inhibited. Five diaryl sulfides were identified. Numerous other assays, e.g., to identify inhibitors of integrin $\alpha E\beta y$ interaction with E cadherin, inhibitors of Rac1 GDP-GTP exchange, or antagonists of E. coli 6-hydroxymethyl-7,8-dihydropterin pyrophosphokinase, were conducted as well.

IT 415718-13-7

RL: BSU (Biological study, unclassified); BIOL (Biological study) (materials and methods to modulate ligand binding/enzymic activity of α/β proteins containing allosteric regulatory site)

RN 415718-13-7 HCAPLUS

CN Piperazine, 1-ethyl-4-[4-[4-[(2-(1-methylethyl)phenyl]thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]-, bis(trifluoroacetate) (9CI) (CFINDEX NAME)

CM 1

CRN 415718-12-6 CMF C27 H30 F3 N3 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2



L12 ANSWER 7 OF 19 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:31429 HCAPLUS

DOCUMENT NUMBER: 136:102394

TITLE: Aryl phenylheterocyclyl sulfide derivatives and their

use as cell adhesion-inhibiting anti-inflammatory and

immune-suppressive agents

INVENTOR(S): Wang, Gary T.; Wang, Sheldon; Gentles, Robert

PATENT ASSIGNEE(S): Abbott Laboratories, USA SOURCE: PCT Int. Appl., 135 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

F	PATENT NO.				KIND DATE			APPLICATION NO.					DATE				
WO 2002002539			A1 20020110			WO 2001-US20128					20010622						
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		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	ΚP,	KR,	KZ,	LC,	LK,	LR,
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	PL,	PT,
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CA 2414461			AA 20020110 CA 2001-2414461						461	20010622							
AU 2001068718			A5		2002	0114	4 AU 2001-68718						20010622				
E	EP 1294	704			A1		2003	0326		EP 2	001-	9467	05		2	0010	622
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	ΑL,	TR						
J	TP 2004										002-					0010	622
N	IZ 5234	45			Α		2004	1029		NZ 2	001-	5234	45		2	0010	622
PRIORI	TY APP	LN.	INFO	. :					•	US 2	000-	6067	17	1	A 2	0000	629
											000-					0000	629
									•	WO 2	001-	US20	128	Ţ	W 2	0010	622
OTHER	SOURCE	(S):			MAR:	PAT	136:	1023	94								

GI

AB Title compds. were prepared for treating inflammatory and immune diseases, such as arthritis, asthma, reperfusion injury, inflammatory bowel disease etc. The products had IC50 <20 mM for inhibition of ICAM-1 binding to LFA-1. 2-Me2CHC6H4SHwas etherified with 4,3-F(F3C)C6H3COMe, followed by bromination, and reaction with 1-carbamoylpiperidine to give the sulfide I.

IT 388118-61-4P 388118-62-5P 388118-65-8P 388118-66-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of aryl phenylheterocyclyl sulfides as cell adhesion-inhibiting antiinflammatory and immunosuppressive agents)

RN 388118-61-4 HCAPLUS

CN Pyridine, 4-[4-[[2-(1-methylethyl)phenyl]thio]-3-(trifluoromethyl)phenyl]-, 1-oxide (9CI) (CA INDEX NAME)

RN 388118-62-5 HCAPLUS

CN Pyridine, 2-chloro-4-[4-[[2-(1-methylethyl)phenyl]thio]-3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 388118-65-8 HCAPLUS

CN Pyridine, 4-[4-[(2-methoxyphenyl)thio]-3-(trifluoromethyl)phenyl]-, 1-oxide (9CI) (CA INDEX NAME)

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IT
     388117-88-2P 388117-89-3P 388117-90-6P
     388117-91-7P 388117-92-8P 388117-93-9P
     388117-94-0P 388117-95-1P 388117-96-2P
     388117-97-3P 388117-98-4P 388117-99-5P
     388118-00-1P 388118-01-2P 388118-02-3P
     388118-03-4P 388118-04-5P 388118-05-6P
     388118-06-7P 388118-07-8P 388118-08-9P
     388118-09-0P 388118-10-3P 388118-11-4P
     388118-12-5P 388118-13-6P 388118-14-7P
     388118-15-8P 388118-16-9P 388118-17-0P
     388118-18-1P 388118-19-2P 388118-20-5P
     388118-21-6P 388118-22-7P 388118-23-8P
     388118-24-9P 388118-25-0P 388118-26-1P
     388118-27-2P 388118-28-3P 388118-29-4P
     388118-30-7P 388118-31-8P 388118-32-9P
     388118-33-0P 388118-34-1P 388118-35-2P
     388118-36-3P 388118-37-4P 388118-38-5P
     388118-39-6P 388118-40-9P 388118-41-0P
     388118-42-1P 388118-43-2P 388118-44-3P
     388118-45-4P 388118-46-5P
     RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological
     study); PREP (Preparation); USES (Uses)
        (preparation of aryl phenylheterocyclyl sulfides as cell adhesion-inhibiting
        antiinflammatory and immunosuppressive agents)
RN
     388117-88-2 HCAPLUS
CN
     3-Pyrrolidinol, 1-[4-[4-[[2-(1-methylethyl)phenyl]thio]-3-
     (trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)
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RN 388117-89-3 HCAPLUS

CN 2-Pyrrolidinemethanol, 1-[4-[4-[[2-(1-methylethyl)phenyl]thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]-, (2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 388117-90-6 HCAPLUS

CN 4-Piperidinol, 1-[4-[4-[[2-(1-methylethyl)phenyl]thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 388117-91-7 HCAPLUS

CN 1-Piperazinecarboxaldehyde, 4-[4-[4-[[2-(1-methylethyl)phenyl]thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 388117-92-8 HCAPLUS
CN D-Proline, 1-[4-[4-[[2-(1-methylethyl)phenyl]thio]-3(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 388117-93-9 HCAPLUS
CN 4-Piperidinemethanol, 1-[4-[4-[[2-(1-methylethyl)phenyl]thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 388117-94-0 HCAPLUS
CN Acetamide, N-[(3R)-1-[4-[4-[[2-(1-methylethyl)phenyl]thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]-3-pyrrolidinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 388117-95-1 HCAPLUS

CN Acetamide, N-[1-[4-[4-[[2-(1-methylethyl)phenyl]thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]-3-pyrrolidinyl]- (9CI) (CA INDEX NAME)

RN 388117-96-2 HCAPLUS

CN Piperazine, 1-acetyl-4-[4-[4-[(2-(1-methylethyl)phenyl]thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 388117-97-3 HCAPLUS

CN 4-Piperidinecarboxamide, 1-[4-[4-[[2-(1-methylethyl)phenyl]thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 388117-98-4 HCAPLUS

CN 4-Piperidinecarboxylic acid, 1-[4-[4-[[2-(1-methylethyl)phenyl]thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 388117-99-5 HCAPLUS

CN 3-Piperidinecarboxylic acid, 1-[4-[4-[[2-(1-methylethyl)phenyl]thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 388118-00-1 HCAPLUS

CN 4-Piperidineethanol, 1-[4-[4-[[2-(1-methylethyl)phenyl]thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 388118-01-2 HCAPLUS

CN D-Proline, 4-hydroxy-1-[4-[4-[2-(1-methylethyl)phenyl]thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]-, (4R)- (9CI) (CA INDEX NAME) Absolute stereochemistry.

RN 388118-02-3 HCAPLUS

CN L-Proline, 4-hydroxy-1-[4-[4-[[2-(1-methylethyl)phenyl]thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]-, (4R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 388118-03-4 HCAPLUS

CN Acetamide, N-ethyl-N-[1-[4-[4-[[2-(1-methylethyl)phenyl]thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]-3-pyrrolidinyl]- (9CI) (CA INDEX

RN 388118-04-5 HCAPLUS

CN 3-Piperidinecarboxylic acid, 4-hydroxy-1-[4-[4-[2-(1-methylethyl)phenyl]thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]-, (3R,4S)-rel-(9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 388118-05-6 HCAPLUS

CN 1-Piperazinepropanamine, N,N-dimethyl-4-[4-[4-[2-(1-methylethyl)phenyl]thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 388118-06-7 HCAPLUS

CN 3-Pyrrolidinol, 1-[4-[4-[(2-methoxyphenyl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]-, (3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 388118-07-8 HCAPLUS

CN 2-Pyrrolidinemethanol, 1-[4-[4-[(2-methoxyphenyl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]-, (2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 388118-08-9 HCAPLUS

CN 4-Piperidinol, 1-[4-[4-[(2-methoxyphenyl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 388118-09-0 HCAPLUS

CN 1-Piperazinecarboxaldehyde, 4-[4-[4-[(2-methoxyphenyl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 388118-10-3 HCAPLUS

CN D-Proline, 1-[4-[4-[(2-methoxyphenyl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 388118-11-4 HCAPLUS

CN 4-Piperidinemethanol, 1-[4-[4-[(2-methoxyphenyl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 388118-12-5 HCAPLUS

CN Acetamide, N-[(3R)-1-[4-[4-[(2-methoxyphenyl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]-3-pyrrolidinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 388118-13-6 HCAPLUS

CN Acetamide, N-[1-[4-[4-[(2-methoxyphenyl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]-3-pyrrolidinyl]- (9CI) (CA INDEX NAME)

RN 388118-14-7 HCAPLUS

CN Piperazine, 1-acetyl-4-[4-[4-[(2-methoxyphenyl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 388118-15-8 HCAPLUS

CN 4-Piperidinecarboxamide, 1-[4-[4-[(2-methoxyphenyl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

$$F_3C$$
 N
 N
 $C-NH_2$
OMe

RN 388118-16-9 HCAPLUS

CN 4-Piperidinecarboxylic acid, 1-[4-[4-[(2-methoxyphenyl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 388118-17-0 HCAPLUS

CN 3-Piperidinecarboxylic acid, 1-[4-[4-[(2-methoxyphenyl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 388118-18-1 HCAPLUS

CN 4-Piperidineethanol, 1-[4-[4-[(2-methoxyphenyl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 388118-19-2 HCAPLUS

CN D-Proline, 4-hydroxy-1-[4-[4-[(2-methoxyphenyl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]-, (4R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 388118-20-5 HCAPLUS

CN L-Proline, 4-hydroxy-1-[4-[4-[(2-methoxyphenyl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]-, (4R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 388118-21-6 HCAPLUS

CN Acetamide, N-[1-[4-[4-[(2-methoxyphenyl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]-3-pyrrolidinyl]-N-methyl- (9CI) (CA INDEX NAME)

RN 388118-22-7 HCAPLUS

CN 1H-1,4-Diazepine, 1-acetylhexahydro-4-[4-[4-[(2-methoxyphenyl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 388118-23-8 HCAPLUS

CN 1-Piperazinepropanamine, 4-[4-[4-[(2-methoxyphenyl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]-N,N-dimethyl- (9CI) (CA INDEX NAME)

RN 388118-24-9 HCAPLUS

CN Piperazine, 1-[4-[4-[(2-methoxyphenyl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]-4-propyl- (9CI) (CA INDEX NAME)

RN 388118-25-0 HCAPLUS

CN 3-Piperidinemethanol, 1-[4-[4-[(2-methoxyphenyl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 388118-26-1 HCAPLUS
CN 3-Pyrrolidinol, 1-[4-[4-[(2,3-dihydro-1,4-benzodioxin-6-yl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]-, (3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 388118-27-2 HCAPLUS
CN 4-Piperidinol, 1-[4-[4-[(2,3-dihydro-1,4-benzodioxin-6-yl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 388118-28-3 HCAPLUS

CN 2-Pyrrolidinemethanol, 1-[4-[4-[(2,3-dihydro-1,4-benzodioxin-6-yl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]-, (2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 388118-29-4 HCAPLUS

CN D-Proline, 1-[4-[4-[(2,3-dihydro-1,4-benzodioxin-6-yl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 388118-30-7 HCAPLUS

CN 4-Piperidinemethanol, 1-[4-[4-[(2,3-dihydro-1,4-benzodioxin-6-yl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 388118-31-8 HCAPLUS

CN Acetamide, N-[(3R)-1-[4-[4-[(2,3-dihydro-1,4-benzodioxin-6-yl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]-3-pyrrolidinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 388118-32-9 HCAPLUS

CN Acetamide, N-[1-[4-[4-[(2,3-dihydro-1,4-benzodioxin-6-yl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]-3-pyrrolidinyl]- (9CI) (CA_INDEX_NAME)

RN 388118-33-0 HCAPLUS

CN Piperazine, 1-acetyl-4-[4-[4-[4-[(2,3-dihydro-1,4-benzodioxin-6-yl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 388118-34-1 HCAPLUS

CN 4-Piperidinecarboxamide, 1-[4-[4-[(2,3-dihydro-1,4-benzodioxin-6-yl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ H_2N-C & & \\ & & \\ O & & \\ \end{array}$$

RN 388118-35-2 HCAPLUS

CN 4-Piperidinecarboxylic acid, 1-[4-[4-[4-[(2,3-dihydro-1,4-benzodioxin-6-yl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 388118-36-3 HCAPLUS

CN 3-Piperidinecarboxylic acid, 1-[4-[4-[(2,3-dihydro-1,4-benzodioxin-6-yl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 388118-37-4 HCAPLUS

CN 4-Piperidineethanol, 1-[4-[4-[(2,3-dihydro-1,4-benzodioxin-6-yl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & \\ \text{HO-CH}_2-\text{CH}_2 & & & \\ \end{array}$$

RN 388118-38-5 HCAPLUS

CN D-Proline, 1-[4-[4-[(2,3-dihydro-1,4-benzodioxin-6-yl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]-4-hydroxy-, (4R)- (9CI) (CA INDEX NAME) Absolute stereochemistry.

RN 388118-39-6 HCAPLUS

CN L-Proline, 1-[4-[4-[(2,3-dihydro-1,4-benzodioxin-6-yl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]-4-hydroxy-, (4R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 388118-40-9 HCAPLUS

CN Acetamide, N-[1-[4-[4-[(2,3-dihydro-1,4-benzodioxin-6-yl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]-3-pyrrolidinyl]-N-methyl- (9CI) (CA INDEX NAME)

RN 388118-41-0 HCAPLUS

CN 1H-1,4-Diazepine, 1-acetyl-4-[4-[4-[(2,3-dihydro-1,4-benzodioxin-6-yl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]hexahydro- (9CI) (CA INDEX NAME)

RN 388118-42-1 HCAPLUS

CN 1-Piperazinepropanamine, 4-[4-[4-[(2,3-dihydro-1,4-benzodioxin-6-y1)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]-N,N-dimethyl- (9CI) (CA INDEX NAME)

RN 388118-43-2 HCAPLUS

CN Piperazine, 1-[4-[4-[(2,3-dihydro-1,4-benzodioxin-6-yl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]-4-propyl- (9CI) (CA INDEX NAME)

RN 388118-44-3 HCAPLUS

CN Piperazine, 1-[4-[4-[(2,3-dihydro-1,4-benzodioxin-6-yl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]-4-(2-propenyl)- (9CI) (CA INDEX NAME)

RN 388118-45-4 HCAPLUS

CN 1-Piperazineethanol, 4-[4-[4-[(2,3-dihydro-1,4-benzodioxin-6-yl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RN 388118-46-5 HCAPLUS

CN 3-Piperidinemethanol, 1-[4-[4-[(2,3-dihydro-1,4-benzodioxin-6-yl)thio]-3-(trifluoromethyl)phenyl]-2-pyridinyl]- (9CI) (CA INDEX NAME)

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

8

L12 ANSWER 8 OF 19 ACCESSION NUMBER:

2001:338638 HCAPLUS

DOCUMENT NUMBER:

REFERENCE COUNT:

134:350265

TITLE:

Water-soluble red-emitting fluorescent rhodamine dyes

THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS

and energy-transfer dye pairs and conjugates for

assays and stains

INVENTOR(S):

Lee, Linda G.; Graham, Ronald J.; Werner, William E.;

Swartzman, Elana; Lu, Lily

HCAPLUS COPYRIGHT 2005 ACS on STN

PATENT ASSIGNEE(S):

PE Corporation, USA PCT Int. Appl., 172 pp.

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

LANGUAGE:

Fudita

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

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WO 200				A1	-	2001	0510	1	WO 2	000-1	US30	414		2	0001	101	
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LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
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             ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                 20010220
     US 6191278
                          В1
                                             US 1999-433093
                                                                     19991103
     US 6372907
                          В1
                                 20020416
                                             US 2000-661206
                                                                     20000914
                          AA
     CA 2358923
                                 20010510
                                             CA 2000-2358923
                                                                     20001101
     EP 1141137
                          A1
                                 20011010
                                             EP 2000-982085
                                                                     20001101
     EP 1141137
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                                 20031008
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO
     JP 2003514058
                          T2
                                 20030415
                                             JP 2001-535469
                                                                     20001101
     AT 251658
                          Е
                                 20031015
                                             AT 2000-982085
                                                                     20001101
     AU 770445
                          B2
                                 20040219
                                             AU 2001-19157
                                                                     20001101
PRIORITY APPLN. INFO.:
                                             US 1999-433093
                                                                     19991103
                                             US 2000-661206
                                                                  Α
                                                                     20000914
                                             WO 2000-US30414
                                                                  W
                                                                     20001101
OTHER SOURCE(S):
                         MARPAT 134:350265
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GI

Ι

AB The present invention provides novel, water-soluble, red-emitting fluorescent rhodamine dyes and red-emitting fluorescent energy-transfer dye pairs, as well as labeled conjugates comprising the same and methods for their use. The dyes, energy-transfer dye pairs and labeled conjugates are useful in a variety of aqueous-based applications, particularly in assays involving staining of cells, protein binding, and/or anal. of nucleic acids, such as hybridization assays and nucleic acid sequencing. A fluorescent-linked immunosorbent assay (FLISA) for human IL-8 used anti-human IL-8 antibody conjugated with rhodamine dye I (preparation given) and monoclonal anti-human IL-8 antibody-coated beads.

IT 339150-30-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(as rhodamine dye; water-soluble red-emitting fluorescent rhodamine dyes and energy-transfer dye pairs and conjugates for assays and stains) 339150-30-0 HCAPLUS

RNCN Pyridinium, 1,1',1''-[6-carboxy-5-[1-[(4-carboxyphenyl)methyl]-11-ethyl-1,2,10,11-tetrahydro-2,2,4,8,10,10-hexamethylpyrano[3,2-g:5,6g']diquinolin-13-ium-6-yl]-3-(phenylthio)-1,2,4-benzenetriyl]tris[4-(dimethylamino) -, mono(inner salt) (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

IT 339150-31-1P

RL: SPN (Synthetic preparation); PREP (Preparation)

(water-soluble red-emitting fluorescent rhodamine dyes and energy-transfer dye pairs and conjugates for assays and stains) 339150-31-1 HCAPLUS

RN

CNPyridinium, 1,1',1''-[6-carboxy-5-[1-[[4-[[(2,5-dioxo-1pyrrolidinyl)oxy]carbonyl]phenyl]methyl]-11-ethyl-2,2,4,8,10,10hexamethylpyrano[3,2-g:5,6-g']diquinolin-13-ium-6-yl]-3-(phenylthio)-1,2,4benzenetriyl]tris[4-(dimethylamino)-, mono(inner salt) (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 9 OF 19 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2001:131227 HCAPLUS

DOCUMENT NUMBER: 134:179914

TITLE: INVENTOR (S): Water-soluble rhodamine dyes and conjugates thereof Lee, Linda G.; Graham, Ronald J.; Werner, William E.;

Swartzman, Elana; Lu, Lily

PATENT ASSIGNEE(S): SOURCE:

PE Corp., USA U.S., 52 pp.

CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PATENT NO.					KIN	D	DATE			APPI	LICAT	ION I	NO.		DATE				
	US	6191	278			B1		2001	0220		US 1	1999-	4330	93		1	9991	103		
	US	6372	907			B1		2002	0416		US 2	2000-	6612	06		2	0000	914		
	CA	2358	923			AA		2001	0510		CA 2	2000-	2358	923		2	0001	101		
	WO	2001	0327	83		A1		2001	0510		WO 2	2000-1	US30	414		2	0001	101		
		W:	ΑE,	AG,	AL,	AM,	AΤ	, AU,	AZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,		
			CR,	CU,	CZ,	DE,	DK	, DM,	DZ,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,		
								, JP,												
			LU,	LV,	MA,	MD,	MG	, MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	PL,	PT,	RO,	RU,		
			SD,	SE,	SG,	SI,	SK	, SL,	TJ,	TM,	TR,	TT,	TZ,	UA,	UG,	UZ,	VN,	YU,		
								, KG,												
		RW:	•	•	•			MZ,	•					ZW,	AT,	BE,	CH,	CY,		
						-		GB,	-				•	-		-	-			
								GA,									•	•		
	EР	1141	-	-	-	-		2001	-	-	-		-	-			0001	101		
								2003							•					
		R:	AT.	BE.	CH.	DE.	DK	, ES,	FR.	GB.	GR.	IT.	LI.	LU.	NL.	SE.	MC.	PT.		
						LV,			,	,	,	,	,	,	· · · · · ·	,	,	,		
	JР	2003	-	-	-				0415	,	JP 2	2001-	5354	69		2	0001	101		
		2516							-			2000-	-				0001	101		
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PRIOR						•••						1999-4						-		
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												2000 -1					0001			

OTHER SOURCE(S): MARPAT 134:179914

The present invention provides novel, water-soluble, red-emitting fluorescent AB rhodamine dyes and red-emitting fluorescent energy-transfer dye pairs, as well as labeled conjugates comprising the same and methods for their use. The dyes, energy-transfer dye pairs and labeled conjugates are useful in a variety of aqueous-based applications, particularly in assays involving staining of cells, protein binding, and/or anal. of nucleic acids, such as hybridization assays and nucleic acid sequencing.

IT326801-79-0P

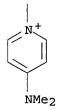
> RL: BUU (Biological use, unclassified); IMF (Industrial manufacture); RCT (Reactant); TEM (Technical or engineered material use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses) (blue dye; production of fluorescent rhodamine dyes for biochem. labeling)

326801-79-0 HCAPLUS RN

Pyridinium, 1,1',1''-[6-carboxy-5-[1-[(4-carboxyphenyl)methyl]-11-ethyl-CN 1,2,10,11-tetrahydro-2,2,4,8,10,10-hexamethylpyrano[3,2-q:5,6g']diquinolin-13-ium-6-yl]-3-(phenylthio)-1,2,4-benzenetriyl]tris[4-(dimethylamino) -, bis(inner salt) (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A



IT 326801-91-6P

ŔŊ

RL: BUU (Biological use, unclassified); IMF (Industrial manufacture); TEM (Technical or engineered material use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(blue dye; production of fluorescent rhodamine dyes for biochem. labeling) 326801-91-6 HCAPLUS

CN Pyridinium, 1,1',1''-[6-carboxy-5-[1-ethyl-1,2,10,11-tetrahydro-2,2,4,8,10,10-hexamethyl-11-[[4-[(1-pyrrolidinyloxy)carbonyl]phenyl]methyl]pyrano[3,2-g:5,6-g']diquinolin-13-ium-6-yl]-3-(phenylthio)-1,2,4-benzenetriyl]tris[4-(dimethylamino)-, mono(inner salt) (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

REFERENCE COUNT:

16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 10 OF 19 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2001:31481 HCAPLUS

DOCUMENT NUMBER:

134:100859

TITLE:

Preparation of 2,4-dioxothiazolidines and 4-oxo-2-thioxothiazolidines having telomerase inhibitory activity and methods of their use

INVENTOR(S):

Chin, Allison C.; Holcomb, Ryan; Piatyszek, Mieczyslaw

A.; Singh, Upinder; Tolman, Richard L.; Akama, Tsutomu; Kanda, Yutaka; Asai, Akira; Yamashita,

Yoshinori; Endo, Kaori; Yamaguchi, Hiroyuki

PATENT ASSIGNEE(S): Geron Corporation, USA; Kyowa Hakko Kogyo Co., Ltd.

SOURCE: PCT Int. Appl., 211 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

:	PAT	CENT	NO.			KIND DATE				APPL	ICAT		DATE					
1	WO 2001002377				A1 20010111				WO 2000-US18211						20000630			
		W:	ΑE,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CR,	CU,
			CZ,	DE,	DK,	DM,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,	HU,	ID,	IL,
			IN,	IS,	JP,	KE,	KG,	ΚP,	KR,	KZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MA,
			MD,	MG,	MK,	MN,	MW,	MX,	NO,	NZ,	ΡL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,
			SK,	SL,	TJ,	TM,	TR,	TT,	TZ,	UA,	ŪG,	US,	UZ,	VN,	YU,	ZA,	ZW,	AM,
			ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM								
		RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZW,	AT,	ΒE,	CH,	CY,
			DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,
			CF,	CG,	CI,	CM,	GΑ,	GN,	GW,	ML,	MR,	ΝE,	SN,	TD,	TG			
ı	JP	2001	0725	92		A2		2001	0321		JP 1	999-	3075	76		1	9991	028
(CA	2341	253			AA		2001	0111		CA 2	000-	2341	253		2	0000	630
	ΕP	1109	796			A1		2001	0627		EP 2	000-	9502	82		2	0000	630
		R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
			ΙE,	SI,	LT,	LV,	FI,	RO				•						
		6518				В1					US 2	000-	6086	36		2	0000	630
		2003						2003	0225		JP 2	001-	5186	71		2	0000	630
1	US	2002	1157	00		A1		2002	0822		US 2	002-	7773	8		2	0020	213
PRIOR	ITY	APP	LN.	INFO	.:						JP 1	999-	1876	16	i	A 1	9990	701
											US 1	999-	1421	73P		P 1	9990	701
											JP 1	.999-	3075	76		A 1	9991	028
											US 2	000-	6088	61		A1 2	0000	630
											WO 2	000-	US18:	211	1	W 2	0000	630

OTHER SOURCE(S): MARPAT 134:100859

GΙ

AB Thiazolidinedione compds. (shown as I; e.g. 5-((2-(4-chlorophenylthio)-5-nitrophenyl)methylene)-2,4-thiazolidinedione), compns., and methods of inhibiting telomerase activity in vitro and treatment of telomerase-mediated conditions or diseases ex vivo and in vivo are provided. In I, X = 0 or S; the dashed bond is a single or double bond; A = aryl or heteroaryl; R1 = H or lower alkyl; R2, R3 and R4 are independently selected from H, halo, alkyl, aryl, hydroxyl, alkoxyl, aryloxy, aralkoxy, cyano, nitro, alkylcarbamido, arylcarbamido,

dialkylcarbamido, diarylcarbamido, alkylarylcarbamido, alkylthiocarbamido, arylthiocarbamido, dialkylthiocarbamido, diarylthiocarbamido, alkylarylthiocarbamido, amino, alkylamino, arylamino, dialkylamino, diarylamino, arylalkylamino, aminocarbonyl, alkylaminocarbonyl, arylaminocarbonyl, dialkylaminocarbonyl, diarylaminocarbonyl, arylalkylaminocarbonyl, alkylcarbonyloxy, arylcarbonyloxy, carboxyl, alkoxycarbonyl, aryloxycarbonyl, sulfo, alkylsulfonylamido, arylsulfonylamido, alkylsulfonyl, arylsulfonyl, alkylsulfinyl, arylsulfinyl and heteroaryl; L is a direct bond or a linking group having from 1 to 3 unsubstituted or substituted C, N, O or S atoms; and n = 1, 2. A pharmaceutically acceptable salt thereof is also claimed. The methods, compds. and compns. of the invention may be employed alone, or in combination with other pharmacol. active agents in the treatment of conditions or diseases mediated by telomerase activity, such as in the treatment of cancer. Also disclosed are novel methods for assaying or screening for inhibitors of telomerase activity. More than 200 example prepns. are included, but the methods of preparation are not claimed. 319454-78-9P, 2-[(4-Methylphenyl)thio]-5-(2-pyridyl)benzaldehyde RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; for preparation of 2,4-dioxothiazolidines and
4-oxo-2-thioxothiazolidines having telomerase inhibitory activity)
319454-78-9 HCAPLUS
Benzaldehyde, 2-[(4-methylphenyl)thio]-5-(2-pyridinyl)- (9CI) (CA IND

Benzaldehyde, 2-[(4-methylphenyl)thio]-5-(2-pyridinyl)- (9CI) (CA INDEX NAME)

IT

RN

CN

having telomerase inhibitory activity and methods of use) RN 319453-29-7 HCAPLUS

2,4-Thiazolidinedione, 5-[[2-[(4-methylphenyl)thio]-5-(2pyridinyl)phenyl]methylene]- (9CI) (CA INDEX NAME)

REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 11 OF 19 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1999:527570 HCAPLUS

DOCUMENT NUMBER: 131:249432

TITLE: Mono- and bimolecular reactions of electrogenerated

diaryl sulfide radical cations and dications

AUTHOR(S): Zhuikov, V. V.

CORPORATE SOURCE: Kazan State University, Kazan, Russia

SOURCE: Russian Journal of General Chemistry (Translation of

Zhurnal Obshchei Khimii) (1999), 69(3), 502-503

CODEN: RJGCEK; ISSN: 1070-3632

PUBLISHER: MAIK Nauka/Interperiodica Publishing

DOCUMENT TYPE: Journal LANGUAGE: English

The electrochem. oxidation of diaryl sulfides was carried out in MeCN/0.01M Et4NBF4 on Pt oxide rotating disk electrode. By the switching technique formation of short-lived radical cations was detected. The electrochem. oxidation of diaryl sulfides ((p-RC6H4)2S, R = H, MeO, Me, Cl) on the Pt oxide rotating disk electrode has two waves and the shape of the wave and the other dependencies suggest that the chemical reaction of the radical cations is second order. Oxidation of Ph2S in the presence of pyridine leads to formation of N-(p-phenylthiophenyl)pyridinium salts with the yields considerably lower going from pyridine to γ -picoline to α -picoline to 2,6-lutidine, which evidently arise from different basicities and nucleophilicities of the pyridine derivs. Intramol. electronic interactions and the nature of approaching foreign nucleophilic reagent can affect the mechanism of reaction of the intermediates.

IT 92639-74-2DP, salts 117186-17-1DP, salts
244215-09-6DP, salts 244215-11-0DP, salts

RL: PNU (Preparation, unclassified); PRP (Properties); PREP (Preparation) (preparation in electrochem. oxidation of di-Ph disulfide in presence of pyridine)

RN 92639-74-2 HCAPLUS

CN Pyridinium, 1-[4-(phenylthio)phenyl]- (9CI) (CA INDEX NAME)

RN 117186-17-1 HCAPLUS

CN Pyridinium, 4-methyl-1-[4-(phenylthio)phenyl]- (9CI) (CA INDEX NAME)

RN 244215-09-6 HCAPLUS

CN Pyridinium, 2-methyl-1-[4-(phenylthio)phenyl]- (9CI) (CA INDEX NAME)

RN 244215-11-0 HCAPLUS

CN Pyridinium, 2,6-dimethyl-1-[4-(phenylthio)phenyl]- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 12. OF 19 HCAPLUS COPYRIGHT 2005 ACS on STN

6

ACCESSION NUMBER:

1998:779499 HCAPLUS

DOCUMENT NUMBER:

130:88236

TITLE:

Guest-host type liquid crystal display with improved

brightness

INVENTOR(S):

Iwanaga, Hironori; Naito, Katsuyuki

PATENT ASSIGNEE(S):

Toshiba Corp., Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 25 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
				-	
JP 10316970	A2	19981202	JP 1997-71587		19970325
US 6057906	Α	20000502	US 1997-825179		19970327
KR 228465	B1	19991101	KR 1997-11507		19970329
PRIORITY APPLN. INFO.:			JP 1996-75614	Α	19960329
	•		JP 1996-236780	Α	19960906
			JP 1997-65145	Α	19970318

OTHER SOURCE(S): MARPAT 130:88236

AB The title display utilizes at least 1 dichroic dye containing thiocarbonyl, thioester, dithioester, selenocarbonyl, selenoester and/or diselenoester. The liquid crystal composition may contain a proton donor and a proton acceptor.

IT 218154-82-6

RL: MOA (Modifier or additive use); USES (Uses) (proton acceptor in liquid crystal composition for guest-host type liquid crystal display)

RN 218154-82-6 HCAPLUS

CN 9,10-Anthracenedione, 1-[(4-ethylphenyl)thio]-5-[[4-(4-pyridinyl)phenyl]thio]- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

Εt

L12 ANSWER 13 OF 19 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1992:621902 HCAPLUS

DOCUMENT NUMBER: 117:221902

TITLE: Electrochemical reactions of heteroorganic compounds AUTHOR(S): Kargin, Yu. M.; Zhuikov, V. V.; Budnikova, Yu. G.;

Fattakhova, D. S.

CORPORATE SOURCE: Kazan. Gos. Univ., Kazan, Russia SOURCE:

Elektrokhimiya (1992), 28(4), 615-28

CODEN: ELKKAX; ISSN: 0424-8570 DOCUMENT TYPE: Journal

LANGUAGE: Russian

Processes are described of intermediates of heteroorg. compds. during fragmentation of ion radicals (with bond cleavage) and disproportionation and dimerization of cation radicals. Special attention is paid to reaction of Si- and P-containing compds. The electrochem. is described. Cation radicals with lower electron d. were characterized by the 2nd order reactions.

TΤ 92639-75-3P 92639-76-4P

> RL: FORM (Formation, nonpreparative); PREP (Preparation) (formation of, in electrochem. reaction of di-Ph sulfide in presence of

organic additives)

92639-75-3 HCAPLUS RN

CN Pyridinium, 1-[4-(phenylthio)phenyl]-, perchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 92639-74-2 CMF C17 H14 N S

CM 2

CRN 14797-73-0 CMF Cl O4

RN 92639-76-4 HCAPLUS

CN Pyridinium, 1-[4-(phenylthio)phenyl]-, tetrafluoroborate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 92639-74-2 CMF C17 H14 N S

CM 2

CRN 14874-70-5 CMF B F4

CCI CCS

L12 ANSWER 14 OF 19 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1991:559137 HCAPLUS

DOCUMENT NUMBER: 115:159137

TITLE: Preparation of 2-(heteroarylphenylthio)benzimidazoles

and related compounds as antiinflammatories and

gastric acid secretion inhibitors

PATENT ASSIGNEE(S): Fisons PLC, UK
SOURCE: Austrian, 21 pp.
CODEN: AUXXAK

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
AT 392788	В	19910610	AT 1988-223	19880203
AT 8800223	A	19901115		
PRIORITY APPLN. INFO.:			AT 1988-223	19880203
OTHER SOURCE(S):	MARPAT	115:159137		
CT				

Title compds. [I; X = O, NR19; W = NR8, CR7:CR8; R4,R5 = H, alkyl, alkoxy, halo, amino; R7,R8 = H, alkyl, alkoxy, amino, morpholino, (substituted) alkoxy; R9,R10 = H, alkyl; R9R10 = atoms to complete a (halo-substituted) Ph ring; R15-R18 = H, alkyl, halo, alkoxy, NO2, amino, (modified) CO2H; R19 = H, (substituted) alkyl; n = O,1], were prepared as antiinflammatories and gastric acid secretion inhibitors (no data). Thus, title compound II was prepared starting from 4-O2NC6H4N2BF4 and 4-methoxypyridine N-oxide and proceeding via 2-(2-mercapto-5-nitrophenyl)-4-methoxypyridine N,N-dimethylcarbonate.

IT 115741-52-1P 115741-80-5P 115741-82-7P RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of, as antiinflammatory and gastric acid secretion inhibitor)
RN 115741-52-1 HCAPLUS
CN 4-Pyridinamine, 2-[2-(1H-benzimidazol-2-ylthio)phenyl]-N-methyl-N-phenyl-

4-Pyridinamine, 2-[2-(1H-benzimidazol-2-ylthio)phenyl]-N-methyl-N-phenyl-(9CI) (CA INDEX NAME)

RN 115741-80-5 HCAPLUS

CN 1H-Benzimidazole, 2-[[2-[4-(4-morpholinyl)-2-pyridinyl]phenyl]thio]- (9CI) (CA INDEX NAME)

RN 115741-82-7 HCAPLUS

CN 4-Pyridinamine, 2-[2-(1H-benzimidazol-2-ylthio)phenyl]-N,N-dimethyl- (9CI) (CA INDEX NAME)

L12 ANSWER 15 OF 19 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1988:590253 HCAPLUS

DOCUMENT NUMBER: 109:190253

TITLE: Preparation of N-[p-phenylthio)phenyl]pyridinium or

-picolinium salts

INVENTOR(S): Latypova, V. Z.; Zhuikov, V. V.; Kargin, Yu. M.

PATENT ASSIGNEE(S): Kazan State University, USSR

SOURCE: U.S.S.R. From: Otkrytiya, Izobret. 1987, (42), 81.

CODEN: URXXAF

DOCUMENT TYPE: LANGUAGE:

Patent Russian

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
SU 1351926	A1	19871115	SU 1986-4029681	19860224
PRIORITY APPLN. INFO.:			SU 1986-4029681	19860224
CT				

$$R \longrightarrow N^+ \longrightarrow SPh X^-$$

AB Title compds. (I) (R = H, Me; X = ClO4, BF4) are prepared by electrochem. oxidation of Ph2S on a Pt electrode in MeCN in the presence of NaClO4 or Et4N+ BF4- and pyridine or γ -picoline at a 5-15 mA/cm2 c.d., at 15-25°, and change in the electrolysis potential from 1.1 to 2.2 V with subsequent evaporation of a solvent, washing the residue with a HClO4 solution, and extracting I with CHCl3.

IT 92639-75-3P 92639-76-4P 117186-18-2P

117186-19-3P

RN 92639-75-3 HCAPLUS

CN Pyridinium, 1-[4-(phenylthio)phenyl]-, perchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 92639-74-2 CMF C17 H14 N S

CM 2

CRN 14797-73-0 CMF Cl O4

RN 92639-76-4 HCAPLUS

CN Pyridinium, 1-[4-(phenylthio)phenyl]-, tetrafluoroborate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 92639-74-2 CMF C17 H14 N S

CM 2

CRN 14874-70-5

CMF B F4

CCI CCS

RN 117186-18-2 HCAPLUS

CN Pyridinium, 4-methyl-1-[4-(phenylthio)phenyl]-, perchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 117186-17-1

CMF C18 H16 N S

CM 2

CRN 14797-73-0

CMF Cl O4

117186-19-3 HCAPLUS RN

CN Pyridinium, 4-methyl-1-[4-(phenylthio)phenyl]-, tetrafluoroborate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 117186-17-1 CMF C18 H16 N S

CM 2

CRN 14874-70-5

CMF B F4 CCI CCS

L12 ANSWER 16 OF 19 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1988:493009 HCAPLUS

DOCUMENT NUMBER:

109:93009

TITLE:

Preparation of heterocyclic-substituted azoles as

gastric secretion inhibitors and antiinflammatories

INVENTOR(S): Cox, David; Dowlatshahi, Hossein Ali; Hall, David

Edward Hall; Ingall, Anthony Howard; Suschitzky, John

Louis

PATENT ASSIGNEE(S): Fisons PLC, UK

SOURCE: Eur. Pat. Appl., 36 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

English LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PAT	ENT NO.			KIND)	DATE		i	APF	LICAT	ON NO	DATE
EP	262845 R: ES,	CP.		A1	•	1988	0406	1	ΕP	1987-	308318	 19870921
WO	8802367		177.17	A1	VD.		0407	Ţ	WO	1987-	GB656	19870921
	W: AU, RW: AT,	-		JP, DE,			IT,	LU,	NI	, SE		
ΑU	8780244			A1		1988	0421	i	UA	1987-	80244	19870921
AU	604771			B2		1991	0103					
EP	283504			A1		1988	0928]	EΡ	1987-	906433	19870921

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R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE
    JP 01501473
                          T2
                                 19890525
                                             JP 1987-505851
                                                                     19870921
                                                                     19870924
    ZA 8707206
                          Α
                                 19880727
                                             ZA 1987-7206
                                                                     19870924
    US 4900751
                          Α
                                 19900213
                                             US 1987-100584
    FI 8802394
                          Α
                                 19880520
                                             FI 1988-2394
                                                                     19880520
    DK 8802876
                          Α
                                 19880701
                                             DK 1988-2876
                                                                     19880525
    NO 8802321
                          Α
                                 19880711
                                             NO 1988-2321
                                                                     19880526
PRIORITY APPLN. INFO.:
                                             GB 1986-23299
                                                                  A 19860927
                                             GB 1986-23301
                                                                  Α
                                                                     19860927
                                             GB 1987-5017
                                                                  Α
                                                                     19870304
                                             GB 1987-19644
                                                                  Α
                                                                     19870820
                                             US 1986-918832
                                                                  A2 19861014
                                             WO 1987-GB656
                                                                  A 19870921
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OTHER SOURCE(S): MARPAT 109:93009

GI For diagram(s), see printed CA Issue.

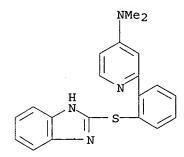
The title compds. [I; R1, R2 = H, alkyl; R1R2 = atoms to complete an (un) substituted, fused benzo or pyrido ring; R3-R10 = H, alkyl, PhCO, amino (un) modified CO2H, (un) substituted alkoxy, heterocyclyl, etc.; X = O, S, R12N; R12 = H, (un) substituted alkyl; A = 5- or 6-membered, fully unsatd. carbocycle or heterocycle; B = 5- or 6-membered, fully unsatd., N-containing heterocycle; n = 0,1] and their pharmaceutically acceptable salts were prepared as gastric secretion and inflammation inhibitors (no data). 4-O2NC6H4N2+ BF4- was treated with 4-methoxypyridine 1-oxide to give 2-(4-methoxy-2-pyridinyl)-4-nitrophenol, which was esterified with Me2NCSCl and converted in 4 steps to give 4-(dimethylamino)-2-(4-methoxy-2-pyridinyl) phenyl disulfide. The latter was refluxed with 2-chlorobenzimidazole and NaBH3CN in HOAc/Me2CHOH to give (phenylthio) benzimidazole II.

CN 4-Pyridinamine, 2-[2-(1H-benzimidazol-2-ylthio)phenyl]-N-methyl-N-phenyl-(9CI) (CA INDEX NAME)

RN 115741-80-5 HCAPLUS CN 1H-Benzimidazole, 2-[[2-[4-(4-morpholinyl)-2-pyridinyl]phenyl]thio]- (9CI) (CA INDEX NAME)

RN 115741-82-7 HCAPLUS

CN 4-Pyridinamine, 2-[2-(1H-benzimidazol-2-ylthio)phenyl]-N,N-dimethyl- (9CI) (CA INDEX NAME)



L12 ANSWER 17 OF 19 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1984:590876 HCAPLUS

DOCUMENT NUMBER: 101:190876

TITLE: Electrochemical reactions of sulfur-, selenium-, and

tellurium-containing organic compounds. XIII.

Oxidation of diphenyl sulfide

AUTHOR(S): Latypova, V. Z.; Yakovleva, O. G.; Zhuikov, V. V.;

Khusaenov, N. M.; Chichirov, A. A.; Kargin, Yu. M.;

Il'yasov, A. V.; Ismaev, I. E.

CORPORATE SOURCE: Kazan. Univ., Kazan, USSR

SOURCE: Zhurnal Obshchei Khimii (1984), 54(5), 1085-9

CODEN: ZOKHA4; ISSN: 0044-460X

DOCUMENT TYPE: Journal LANGUAGE: Russian

GΙ

$$N^{+}$$
 SPh X^{-}

- AB The electrochem. oxidation of Ph2S in MeCN-NaClO4 produced the cation radical, which disproportionated to form the dication; the latter reacted with certain nucleophiles. When pyridine was present, pyridinium salts I (X = ClO4, BF4) could be obtained.
- IT 92639-75-3P 92639-76-4P

RN 92639-75-3 HCAPLUS

CN Pyridinium, 1-[4-(phenylthio)phenyl]-, perchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 92639-74-2 CMF C17 H14 N S

CM 2

CRN 14797-73-0 CMF Cl O4

CM 1

CRN 92639-74-2 CMF C17 H14 N S

CM 2

CRN 14874-70-5 CMF B F4 CCI CCS

L12 ANSWER 18 OF 19 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1983:125895 HCAPLUS

DOCUMENT NUMBER: 98:125895

TITLE: 2,6-Diarylpyridinecarboxylic acids and their

therapeutic utility

INVENTOR(S): Skaletzsky, Louis Leonard

PATENT ASSIGNEE(S): Upjohn Co. , USA

SOURCE: Eur. Pat. Appl., 28 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	rent i	. O <i>l</i>		KINI)	DATE			API	PLICATION	DATE			
						-							-	
EP	6438	5			A1		1982	1110		EP	1982-3023	180		19820428
EP	6438	5			B1		1986	0402						
	R:	BE,	CH,	DE,	FR,	GB.	, IT,	NL,	SE					
US	4377	586			Α		1983	0322		US	1981-2593	135		19810430
CA	1182	397			A1		1985	0212		CA	1982-3989	962		19820322
ZA	82022	249			Α		1983	0223		ZA	1982-2249	9		19820401
JP	5718	5263			A2		1982	1115		JP	1982-705	50		19820428
US	4474	791			Α		1984	1002		US	1982-449	101		19821213
CA	1179	676			A2		1984	1218		CA	1984-4463	371		19840130
PRIORITY	Y APP	LN.	INFO	. :						US	1981-2593	135	Α	19810430
										CA	1982-3989	962	А3	19820322

GI

$$R^{1}$$
 R^{2}
 R^{2}
 R^{3}
 R^{4}
 R^{3}
 R^{4}
 R^{5}
 R^{5}
 R^{5}
 R^{7}
 R^{1}
 R^{2}
 R^{2}
 R^{3}
 R^{4}
 R^{5}
 R^{5

AB Antihypertensive (no data) diarylpyridinecarboxylates I [R = H, Me; R1 = H, F3C; R2 = H, Cl, F, Br, iodo, Me, CF3; R3 = H, Me, halo, F3C, Ph, PhO, 4-FC6H4, 4-FC6H4O; R4 = H, Cl, F, F3C, Me; R3R4 = (CH2)4, benzo; R5 = H, alkoxy, acetoxy] and their salts were prepared Thus, cyclocondensation of 4-BrC6H4COCH:CHCO2H, the pyridinium salt II and NH4OAc in refluxing MeOH containing HOAc gave 40% I (R = R1 = R3 = R5 = H; R2 = Br; R4 = F3C).

IT 85019-10-9P 85031-37-4P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)

RN 85019-10-9 HCAPLUS

CN 4-Pyridinecarboxylic acid, 2-(4-chlorophenyl)-6-[4-(phenylthio)phenyl](9CI) (CA INDEX NAME)

RN 85031-37-4 HCAPLUS

4-Pyridinecarboxylic acid, 2-(4-bromophenyl)-6-[4-(phenylthio)phenyl]-CN (CA INDEX NAME)

$$\texttt{Br} \qquad \qquad \texttt{SPh}$$

L12 ANSWER 19 OF 19 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1972:448149 HCAPLUS

DOCUMENT NUMBER: 77:48149

TITLE: N-Phenylpyridinium salts. 2. Reactivity of

N-(3-nitro-4-chlorophenyl)pyridinium chloride

Lipke, Bodo; Lachmann, Christel; Schmidt, Reinhard AUTHOR (S):

CORPORATE SOURCE: Sekt. Chem., Humboldt-Univ. Berlin, Berlin, Ger. Dem.

Rep.

SOURCE: Zeitschrift fuer Chemie (1972), 12(3), 103-4

CODEN: ZECEAL; ISSN: 0044-2402

DOCUMENT TYPE: Journal LANGUAGE: German

GI For diagram(s), see printed CA Issue.

The title compound (I) reacted with N2H4.H2O in boiling EtOH to give the hydrazino compound II only in small yields and as the benzylidene derivative III. III was obtained in increased yields by reaction of I with PhCH:NNH2. I and PhNHNH2 gave the triazolyl derivative IV. I and H2NNHCSNH2 or PhSH gave the corresponding thio ethers, which were cleaved with pyrrolidine to give 3,4-O2N(PhS)C6H3NH2 and 3,4-O2N(2-HO2CC6H4S)C6-H3NH2, resp. Similar cleavage of IV gave the expected 5-amino derivative V.

37059-28-2P 37059-29-3P 37059-30-6P IT

> RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)

RN

37059-28-2 HCAPLUS Pyridinium, 1-[3-nitro-4-(phenylthio)phenyl]-, chloride (9CI) CN

RN 37059-29-3 HCAPLUS

CN Pyridinium, 1-[3-nitro-4-(phenylthio)phenyl]-, iodide (9CI) (CA INDEX NAME)

• I-

RN 37059-30-6 HCAPLUS
CN Pyridinium, 1-[3-nitro-4-(phenylthio)phenyl]-, nitrate (9CI) (CA INDEX NAME)

CM 1

CRN 47226-33-5 CMF C17 H13 N2 O2 S

CM 2

CRN 14797-55-8 CMF N O3